BRUHAT BANGALORE MAHANAGARA PALIKE

Name of Work : Additional Developmental Works to Urdu School in Attur Ward no - 04 of Yelahanka Satellite town sub division

Estimation Cost 2000000.00

Sl No	Description of Item	Mesurement					Qty	Rate	Amount
		Unit	No	L	B	D			
1	Earth work excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work. Depth exceeding 1.5m, but not exceeding 3 m (PWD SR 2021-22 Vol -I Pg 5 item No. 1.4.2)								
	Sump	Cum	1	3.3	3.3	2.0	21.78		
	Stair Case								
	Footing	Cum	2	1.5	1.5	1.8	8.1		
	Basic rate							199.00	
	Area weightage 10%							19.9	
	Total						29.88	218.9	6540.73
2	KSRB 2.8 : Providing and Filling in foundation with granite / trap broken metal 100mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. complete as per specifications. Specification No. (PWD SR 2021-22 Vol -2 CORRIGENDA.item No 6.4)								
	Sump	Cum	1.00	3.30	3.30	0.30	3.267		
	Stair Case								
	Footing	Cum	2.00	1.50	1.50	0.30	1.35		
	Basic rate							2561.00	
	Area weightage 10%							256.10	
	Total						4.62	2817.1	13006.55
3	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. Mix 1:3:6 (M10) Using 40 mm nominal size graded crushed coarse aggregates.Specification (PWD SR 2021-22 Vol -I Pg 15 item no 2.1.3)								
	Sump	Cum	1	3.3	3.3	0.15	1.63		
	Stair Case								
	Footing	Cum	2.00	1.50	1.50	0.15	0.675		
	Flooring								
	Room 1	Cum	1	5.95	5.50	0.15	4.90875		
	Room 2	Cum		7.55	5.56	0.15	6.2967		
	Room 3	Cum	1	5.95	5.35	0.15	4.774875		
	Room 4	Cum	1	3.50	3.45	0.15	1.81125		
	Room 5	Cum	1	3.50	3.45	0.15	1.81125		
	Cobble Stone								
		Cum	1	6.58	3.40	0.15	3.3558		
		Cum	1	4.30	4.00	0.15	2.58		
		Cum	1	22.30	3.50	0.15	11.7075		
	Basic rate							5554.00	
	Area weightage 10%							555.4	
	Total						39.55	6109.4	241655.03
4	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/ trap/ basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) M25 Design Mix Using 20 mm nominal size graded crushed coarse aggregates (Vol 2/ P No-17/ I no- 2.4.3 of PWD SR 2021-22)								
	For sump								
	For sump								
	Bottom slab	Cum	1	3.30	3.30	0.20	2.18		
	Sump walls	Cum	2	3.30	0.20	1.50	1.98		
		Cum	2	3.00	0.20	1.50	1.80		
	Cover slab	Cum	1	3.00	3.30	0.20	1.98		

Stair Case									
Footing	Cum	2.00	1.50	1.50	0.40	1.8			
Deduction									
Opening	Cum	-1	1.00	1.00	0.15	-0.15			
Basic rate							5992.00		
Add 8% For Shuttering							479.36		
Sub Total							6471.36		
Area weightage 10%							647.14		
Total						9.59	7118.50	68252.14	

5 Providing and laying in position Reinforced cement concrete for all **Super structures of building** , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/ trap/ basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement, dowel bars & formwork to be paid separately) **M25 Design Mix** Using 20 mm nominal size graded crushed coarse aggregates (Vol 2/ P No-17/ I no- 2.5.2 of PWD SR 2021-22)

Columns upto beam bottom								
	Cum	1	3	0.2	0.30	0.18		
	Cum	1	7.4	0.2	0.30	0.44		
Basic rate							6186.00	
Add 10% for Shuttering							618.60	
Sub total							6804.60	
Area weightage 10%							680.46	
Total						0.62	7485.06	4670.68
Stair case								
Waist Slab for Flight 1	Cum	1	4.83	1.5	0.15	1.09		
Waist Slab for Flight 2	Cum	1	4.83	1.5	0.15	1.09		
Riser and treads	Cum	24	1.5		0.023	0.81		
		Triangular area=0.5*0.3*0.15=0.0225						
Landing	Cum	1	3.15	1.2	0.15	0.57		
Basic rate							6186.00	
Add 20% for Shuttering							1237.20	
Sub total							7423.20	
Area weightage 10%							742.32	
Total						3.55	8165.52	28991.68

6 Providing Thermo-Mechanically Treated bars of grade Fe-550 Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position, binding and anchoring to adjacent members whereever necessary complete as per Design including cost of material, labour, usage charges complete as per specifications. (The laps and wastages shall not be measured separately) (Vol- 1 P.No. 84/I.No. 11.32 of PWD SR 2021-22 1st Corrigenda)

Footing	Cum					1.80		
	kg	Steel assumed 100 Kg/Cum of Concrete				180.00		
Sump	Cum					7.79		
	kg	Steel assumed 125 Kg/Cum of Concrete				973.50		
Staircase	Cum	Concrete Quantity				3.55		
	kg	Steel assumed 100 Kg/Cum of Concrete				355.05		
Column	Cum	Concrete Quantity				0.62		
	kg	Steel assumed 120 Kg/Cum of Concrete				76.8		
Basic rate							96.00	
Area weightage 10%							9.60	
Total						1585.30	105.60	167407.89

7 Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations and other similar works etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m. ((PWD SR 2021-22 Vol- 1 P.No -7 / I.No -1.9)

Filling Available of Excavated Earth								
Earth Work Excavation	Cum	From Item No. 01				29.88		
PCC	Cum	From Item No. 03				-21.91		

	Filling in foundation with granite / trap broken metal	Cum	From Item No. 02				-4.62			
	Footing Concrete	Cum	From Item No. 04				-1.80			
	Basic rate							204.00		
	Area weightage 10%							20.40		
	Total						1.55	224.40		348.20
8	**Loading and Unloading of Stone Boulder/Stone aggregates/ Sand/Kankar/Moorum.(Tipper 14 m3) (PWD SR 2021-22 Vol-III Page No.3,Item No.1.1C)**									
	Excavated Earth	Cum					29.88			
	Filling Available of Excavated Earth						-1.55			
	Basic rate							74.00		
	Area weightage 10%							7.40		
	Total						28.33	81.40		2305.93
9	Cost of Haulage Excluding Loading and Unloading Taking output 10 t load and lead 10 km = 100 t.km (PWD SR 2021-22 Vol-III Page No.3, Item No.1.4A)									
		t.Km		28.33		1.280	36.26			
	Basic rate							12.00		
	8Km 12*8							96.00		
	Area weightage 10%							9.60		
	Total						36.26	117.60		4264.21
10	Finishing walls with Acrylic Smooth exterior paint of required shade :New work (Two coat applied @ 1.67 ltr/10 m² over and including priming coat of exterior primer applied @ 2.20 kg/10 m²) with paint of approved quality to give an even shade, after thoroughly brooming the surface to remove all dirt, dust, mortar drops and foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge.(PWD SR 2021-22 Vol -II Pg 46 item no 8.30)									
	Outside Painting									
	Provide Painting Outside									
		Sqm	2	14.20		3.12	88.608			
		Sqm	2	6.00		3.12	37.44			
		Sqm	2	5.95		3.12	37.128			
		Sqm	2	7.50		3.12	46.8			
	Deducation									
	D	Sqm	-1	1.15		2.10	-2.415			
	D1	Sqm	-1	1.05		2.10	-2.205			
	OD	Sqm	-1	1.20		2.10	-2.52			
	D2	Sqm	-2	0.75		2.10	-3.15			
	W	Sqm	-11	1.45		1.15	-18.3425			
	V	Sqm	-2	2.45		0.30	-1.47			
	Basic rate							136.00		
	Area weightage 10%							13.6		
	Total						179.87	149.60		26909.08
11	Finishing with Epoxy paint (two coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete. On concrete work including preparing the surface after thorougly cleaning oil, grease, dirt and foreign matter, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge.(PWD SR 2021-22 Vol -II Pg 48 item no 8.36.2)									
	Inside Painting									
	Room 1									
		Sqm	2	5.95		3.00	35.7			
		Sqm	2	5.50		3.00	33			
	Roof Sealing painting	Sqm	1	5.95	5.50		32.725			
	Room 2									
		Sqm	2	7.55		3.00	45.3			
		Sqm	2	5.56		3.00	33.36			
	Roof Sealing painting	Sqm		7.55	5.56		41.978			
	Room 3									
		Sqm	2	5.95		3.00	35.7			
		Sqm	2	5.35		3.00	32.1			
	Roof Sealing painting	Sqm	1	5.95	5.35		31.8325			
	Gents Toilet									
		Sqm	2	3.45		3.00	20.7			
		Sqm	2	3.50		3.00	21			
	Roof cealing painting	Sqm	1	3.50	3.45		12.075			
	Ladies Toilet									
		Sqm	2	3.45		3.00	20.7			

	Sqm	2	3.50		3.00	21		
Roof cealing painting	Sqm	1	3.50	3.45		12.075		
Deducation								
D	Sqm	-1	1.15		2.10	-2.415		
D1	Sqm	-1	1.05		2.10	-2.205		
OD	Sqm	-1	1.20		2.10	-2.52		
D2	Sqm	-2	0.75		2.10	-3.15		
W	Sqm	-11	1.45		1.15	-18.3425		
V	Sqm	-2	2.45		0.30	-1.47		
Basic rate							138.00	
Area weightage 10%							13.8	
Total						399.14	**151.8**	**60589.91**

12 Providing and laying water proofing treatment to the Roof with PU based single component elastomeric pure polyurethane based coating on New terrace/Chajjas/Sunken portion of WC:Bathroom, cold applied PU waterproofing membrane that is highly elastic with elongation greater than 400% and tensile strength greater than 2MPa as per ASTM D412. The waterproofing membrane to be applied in 2coats @ 1.6kg per m2 to achieve final DFT (dry film thickness) of 1mm including prime coat of epoxy primer @150 g per m2 and protection with 120gsm Geo-textile over the waterproofing membrane. The finished cost to include surface preparation, making coving at Junction, Bore Packing, treatment of construction joints completely as per specification & with a 10 years warranty on product & work from certified manufacturers as per the direction of the Engineer In charge. (PWD SR 2021-22 Vol -II Pg 133 item no 15.1)

For sump								
Bottom Slab	Sqm	1	3.3	3.3		10.89		
Sump walls	Sqm	2	3.3		2.0	13.2		
	Sqm	2	3		2.0	12		
Basic rate							745.00	
Area weightage 10%							74.50	
Total						36.09	**819.50**	**29575.76**

13 Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing , curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge. ** Polished Granite stone slab Black, Cherry Red, Brown, Cat Eye, River Pink or equivalent. (PWD SR 2021-22 Vol -II Pg 63 item no 9.24)

Inside Rooms								
Room								
Room 1	Sqm	1	5.95	5.50		32.725		
Room 2	Sqm	1	7.55	5.56		41.978		
Room 3								
	Sqm	1	5.95	5.35		31.8325		
Bathroom								
Boys	Sqm	1	3.45	3.50		12.075		
Girls	Sqm	1	3.45	3.50		12.075		
Corridor	Sqm	1	6.58	1.50		9.87		
	Sqm	1	5.35	1.50		8.025		
Stair Case								
Tread	Sqm	24	1.5	0.30		10.80		
Riser	Sqm	23	1.5		0.13	4.49		
Landing	Sqm	1	2	0.85		1.70		
Basic rate							2870.00	
Area weightage 10%							287.00	
Total						165.57	3157.00	522690.28

14 Providing and placing on terrace(at all floor levels), polyethylene water storage tanks as per IS 12701 marked,with cover and suitable locking arrangement and making necessary holes for inlet,outlet and overflow pipes but without fittings and the base support for tank(For 1000 litre capacity) (PWD SR 2021-22 1st Corrigenda Vol II.Sl No.12.Item No 13.34)..

Tank								
	lts	1000				1000.00		
Basic rate							8.00	
Area weightage 10%							0.80	
Total						1000.00	8.80	8800.00

15	Supply and delivery of Centrifugal pumpset at site brand new best make and with discharge duty confirming to ISI standards and its latest amendments2 HP, Size 50x40 Head 22M, Discharge 186 LPM . (PWD SR 2021-22 Vol -V Pg 164 item no 46.2)								
	Motor	**Each**	**1**				**1**		
	Basic rate							**17470.00**	
	Area weightage 10%							**1747**	
	Total						**1.00**	**19217**	**19217.00**
16	Providing and fixing Chorinated Poly Venyl Chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamp at 1.00 mtr spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement & the cost of cutting chases & making good the same including testing of joints complete. (Concealed work including cutting chases and good the walls etc.,) 20mm nominal dia pipes (PWD SR 2021-22 1st Corrigenda Vol II. SL No. 10 .Item No 13.32.2)								
	Pipe	m	100				100.00		
	Basic rate								
	Area weightage 10%							**373**	
	Total							**37.30**	
							100.00	**410.30**	**41030.00**
17	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete : 20 mm nominal bore (PWD SR 2021-22 Vol II. PgNo 115.Item No 13.5.2)								
	Valve	Nos.	3				3.00		
	Basic rate								
	Area weightage 10%							**360**	
	Total							**36.00**	
							3.00	**396.00**	**1188.00**
18	Providing & fixing of 3-track x 2-panel sliding windows made out of multi chambered UPVC(Matching to RAL-9016) sections and with minimum TiO2(Titanium Dioxide) at 6PHR with TPE(Thermo Plastic Elastomer) and lead free, gaskets -grey colour having isolated drainage and reinforced with Galvanized Iron profile through-out the window frame. The outer frame having an overall size of 108mm width x 45mm height with reinforcement of 1mm thickness and Sash with overall size of 39mm x 75mm with GI reinforcement of 2mm and mesh sash of size 37mm x 58mm. Coextruded Glazing bead for fixing of glass shall be of size 20mm x 24 mm. Windows shall be provided with 6mm plain float glass, standard hardware& Multi point locking system with touch lock. Wall thickness of frame & sash shall be of 2mm-2.5mm. Maximum possible size – 2419mm x 2200mm. (The cost is inclusive of all fixtures and separate charges for minor T&P's shall not be made). (PWD SR 2021-22 Vol -II Pg 112 item no 12.9)								
	W	Sqm	11	1.45		1.15	18.34		
	Basic rate								
	Area weightage 10%							7240.00	
	Total							724.00	
							18.34	**7964.00**	**146079.67**
19	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I. brackets, 40 mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required : W.C. pan with ISI marked white solid plastic seat and lid(PWD SR 2021-22 Vol II. PgNo.123.Item No14.3.1)								
	WC Pan	Each	4				4.00		
	Basic rate								
	Area weightage 10%							**5005.00**	
	Total							**500.50**	
							4.00	**5505.50**	**22022.00**
20	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the wallswherever require: White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps(PWD SR 2021-22 Vol II. PgNo 124.Item No 14.7.1)								
	Wash Basin	Each	4				4.00		
	Basic rate								
	Area weightage 10%							**2529.00**	
	Total							**252.90**	
							4.00	**2781.90**	**11127.60**
21	Providing and fixing brass bib cock of approved quality : 20 mm nominal bore (PWD SR 2021-22 Vol II. PgNo 115.Item No 13.2.2)								
	Bib Cock	Nos.	10				10.00		
	Basic rate								
	Area weightage 10%							**345**	
	Total							**34.50**	
							10.00	**379.50**	**3795.00**

22	Providing and fixing brass stop cock of approved quality : 20 mm nominal bore (PWD SR 2021-22 Vol II. PgNo 115.Item No 13.3.2)								
	Stop cock	Nos.	6				**6.00**		
	Basic rate								
	Area weightage 10%							**345**	
	Total							**34.50**	
							6.00	**379.50**	**2277.00**
23	Providing and fixing on wall face unplasticised rigid PVC rain water pipes conforming to IS:13592 Type A, including jointing with seal ring conforming to IS:5382, leaving 10mm gap for thermal expansion, [i] single socketed pipes 100mm diameter (PWD SR 2021-22 1st Corrigenda Vol II SL No. 27 .Item No 13.48)								
	Rain Water pipes	m	50				50.00		
	Basic rate								
	Area weightage 10%							**253**	
	Total							**25.30**	
							50.00	**278.30**	**13915.00**
24	Providing and laying heavy duty cobble stones 75mm thick interlock pavers, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per m2 over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and Usage charges of machinery complete as per specifications. (PWD SR 2021-22 Vol II Pg no 64 Item No 9.32)								
		Sqm	1.00	6.58	3.40		22.37		
		Sqm	1.00	4.30	4.00		17.20		
		Sqm	1.00	22.30	3.50		78.05		
	Basic rate							**1145.00**	
	Area weightage 10%							**114.50**	
	Sub Total							**1259.50**	
	Total						**117.62**	**1259.50**	**148145.00**
	Electrical Connection								
25	Open conduit System: Supplying heavy gauge PVC conduit pipe ……dia confirming to IS 2509 with suitable size bends, plugs in case of RCC ceiling and RCC wall stone structure or rawl plugs in case of brick walls and cement plastering damaged portion using heavy gauge saddles at an interval of 700mm using WF screws.a) 19/20mm dia 2mm thick (PWD Electrical SR 2021-22 Chapter 1 PgNo 1.Item No 1.1.1)								
		m	70				70.00		
	Basic rate							68	
	Total						**70.00**	**68.00**	**4760.00**
26	Supplying and flush mounting teak wooden box without front plank, made of not less than 15mm thick wood, after due groove cutting, necessary masonry patch work complete. d)8''x6''x3''(203x152x76mm) (PWD Electrical SR 2021-22 Chapter 1 PgNo 2.Item No 1.6.4)								
		Each	6				6.00		
	Basic rate							75.00	
	Total						**6.00**	**75.00**	**450.00**
27	Point wiring using copper wire with switch Supplying and wiring adopting loop system in existing PVC Conduit/casing caping using Copper PVC insulated multi strand 2x1.5Sqmm copper wire with a 6Amps flush type SP control switch shall be fixied on the exisiting plastic sheet /gang box, the pther end of the wires shall be terminated with sufficient loose length in a wood/PVC round block.complete for each outlet I Point wiring using class A materials a) Short point upto 3Mtr from tapping point to out let via switch(PWD Electrical SR 2021-22 Chapter 2 PgNo 2.Item No 2.1.1)								
		Point	2				2.00		
	Basic rate							276.00	
	Total						**2.00**	**276.00**	**552.00**
28	Point wiring using copper wire with switch Supplying and wiring adopting loop system in existing PVC Conduit/casing caping using Copper PVC insulated multi strand 2x1.5Sqmm copper wire with a 6Amps flush type SP control switch shall be fixied on the exisiting plastic sheet /gang box, the pther end of the wires shall be terminated with sufficient loose length in a wood/PVC round block.complete for each outlet I Point wiring using class A materials b) Medium point above 3Mtr upto 6Mtr from tapping pointr to out let via switch(PWD Electrical SR 2021-22 Chapter 2 PgNo 3.Item No 2.1.2)								
		Each	2				2.00		
	Basic rate							386.00	
	Total						**2.00**	**386.00**	**772.00**
29	Point wiring using copper wire with switch Supplying and wiring adopting loop system in existing PVC Conduit/casing caping using Copper PVC insulated multi strand 2x1.5Sqmm copper wire with a 6Amps flush type SP control switch shall be fixied on the exisiting plastic sheet /gang box, the pther end of the wires shall be terminated with sufficient loose length in a wood/PVC round block.complete for each outlet. I Point wiring using class A materralse)Long point above 6Mtr upto 10Mtr from tapping point to out let via switch (PWD Electrical SR 2021-22 Chapter 2 PgNo 3.Item No 2.1.3)								
		Each	5				5.00		

	Basic rate								
	Total							567	
30	Supplying 6A flush/projected type socket and a 6 amps flush/ projected type SP switch either surface/flush mounting in a exisiting gang box or in a 4mm thick plastic sheet and fixing over a flush mounted wooden box and wiring using necessary capacity wires as required. b) 6Amps 3/5 way (PWD Electrical SR 2021-22 Chapter 2 PgNo 5.Item No 3.1.2)						5.00	567.00	2835.00
		Each	2				2.00		
	Basic rate								
	Total							143	
31	Wiring for lighting/power circuit using one of FLRS PVC insulated 1100v grade, multis and CopperWITH LOW conductor single core cable in open or consealed system of wiring.I Group A Materials.a) 1.5 sqmm (PWD Electrical SR 2021-22 Chapter 2 PgNo 3.Item No 2.3.2)						2.00	143.00	286.00
		m	90				90.00		
	Basic rate								
	Total							26	
32	Wiring for lighting/power circuit using one of FLRS PVC insulated 1100v grade, multis and CopperWITH LOW conductor single core cable in open or consealed system of wiring.I Group A Materials.b)2.5Sqmm (PWD Electrical SR 2021-22 Chapter 2 PgNo 3.Item No 2.3.3)						90.00	26.00	2340.00
		m	60				60.00		
	Basic rate								
	Total							40	
33	Wiring for lighting/power circuit using one of FLRS PVC insulated 1100v grade, multis and CopperWITH LOW conductor single core cable in open or consealed system of wiring I Group A Materials.c) 4 sqmm (PWD Electrical SR 2021-22 Chapter 2 PgNo 3.Item No 2.3.4)						60.00	40.00	2400.00
		m	160				160.00		
	Basic rate								
	Total							59	
							160.00	59.00	9440.00
34	Supplying 4mm thick plastic sheet with necessary niches for fixing switches, regulators etc., and fixing on exisiting wood or metal box using N.F.screws (PWD Electrical SR 2021-22 Chapter 2 PgNo 6.Item No 3.8)								
		Sq cm	2000				2000.00		
	Basic rate								
	Total							0.29	
35	Supplying and fixing retrofit type -PL-LED lamp…W LED linear Source with CCT 6500 degree K, CRI>70%efficacy>80 lumen per watt.life>25000 burning hours and compliance to IS 10322/IEC 60598,LM 79 and LM80.The LED are driven by HF electroniedriver integrated in the system, with PF>0.95, power loss Should <5% of lam Wattage.,short Circuit and open circuit Protection to be integrated Circuit, THD less than 20%,life as per LM79.the operating input voltage should be between130 t 275 volts.Tested by NABL/CPRI accredited laboratory with 2 years Warranty agnist any manufacturing defect working under standard electrical condition.18-20Watts (PWD Electrical SR 2021-22 Chapter 11 PgNo 34.Item No 11.2.2)						2000.00	0.29	580.00
		Each	6				6.00		
	Basic rate								
	Total							691	
36	Supply wall mountaing fan suitable to operate of single phase -230v A.C supply 400mm sweep a.group A (PWD Electrical SR 2021-22 Chapter 6 PgNo 23.Item No 6.5.2)						6.00	691.00	4146.00
		Each	6				6.00		
	Basic rate								
	Total							2838	
37	Supplying and fixing of T5 Fluorescent Tube with 14W power consumption with low 3mg Mercury content & below 40% glass content than T8 lamp & 20% less phosphor coating than T8 with initial lumen on 1350 (for 3000-6500 deg Kelvin), rated Avg life (12 Hr. Cycle) of greater than 35000 burring hours. Operating voltage range from 180V to 265V, 50Hz AC power Supply(PWD Electrical SR 2021-22 Chapter 12 PgNo 40.Item No 12.18.1)						6.00	2838.00	17028.00
		Each	4				4.00		
	Basic rate								
	Total							132	
38	Supply and fixing polished wood board made of not less than 15mm thick plank on both sides with plank made out of not more than 2 pices and fixing the same to the wall using tapered inverted woode plug screws etc., a) 20"x20"2.5" (PWD Electrical SR 2021-22 Chapter 5 PgNo 10.Item No 5.6.6)						4.00	132.00	528.00
		Each	4				4.00		
	Basic rate								
	Total							315	
39	Supplying and fixing of Procelain fuse channel with cut out on exisiting wooden/panel using necessary nuts, bolts and washers etc., complete.a) 32Amps (PWD Electrical SR 2021-22 Chapter 5 PgNo 10.Item No 5.7.2)						4.00	315.00	1260.00

		Each	8				8.00		
	Basic rate							200	
	Total						**8.00**	**200.00**	**1600.00**
40	Supply of an load charge over switches 4poles 415v 50Hz A.C supply with AC23A duty a) up to 63amps Groups A (PWD Electrical SR 2021-22 Chapter 5 PgNo 11.Item No 5.11.1)								
		Each	1				1.00		
	Basic rate							5185	
	Total						**1.00**	**5185.00**	**5185.00**
41	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and C type curve indicator ON/OFF Energy cross 3 with short circuit breaking capacity of 10K and complete wiring as required. e)6-32amps TPN . Group A (PWD Electrical SR 2021-22 Chapter 5 PgNo 13.Item No 5.17.9)								
		Each	2				2.00		
	Basic rate							2399	
	Total						**2.00**	**2399.00**	**4798.00**
42	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and C type curve indicator ON/OFF Energy cross 3 with short circuit breaking capacity of 10K and complete wiring as required. 6-32amps TPN Group A (PWD Electrical SR 2021-22 Chapter 5 PgNo 13.Item No 5.17.7)								
		Each	3				3.00		
	Basic rate							1777	
	Total						**3.00**	**1777.00**	**5331.00**
43	Supplying, fixing and wiring Electronic Trivector Meter (ETV) 5 to 32/63 A three phase 4 wire whole current class-1 Accuracy Energy Meter.(PWD Electrical SR 2021-22 Chapter 5 PgNo 13.Item No 5.35)								
		Each	1				1.00		
	Basic rate							5125	
	Total						**1.00**	**5125.00**	**5125.00**
44	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipments on the meter board using 40mm dia 2.90 thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proprotion of salt and charcoal 150mm alround the pipe to complete depth. the connection form the pipe to the conduit etc, is to be established through GI wire of size as oer ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and checknuts etc, the pipe shall have 16 through holes of 12mm dia								
		Nos.	2				2.00		
	Basic rate							2999	
	Total						**2.00**	**2999.00**	**5998.00**
45	Supplying and running of GI/Copper strips for grounding connections using necessary fixing material as required GI strip 25x3mm								
		m	40				40.00		
	Basic rate							75	
	Total						**40.00**	**75.00**	**3000.00**
46	Supplying of LT UG cable having aluminium conductor PVC insulated, sheathed, galvanished, steel wire/steel tap armoured cable with PVC outer sheating 1.1 KV class.I. Class 'A' PVC Cable.d) 4 core 16 sqmm								
		m	50				50.00		
	Basic rate							150	
	Total						**50.00**	**150.00**	**7500.00**
47	Labour charges for lying of 1.1 KV class UG cable when supplied agency in existing trench GI pipe / stoneware pipe / on wall /on pole as required. I. In existing trench/duct a) 6 sqmm to 16 sqmm								
		m	50				50.00		
	Basic rate							11.88	
	Total						**50.00**	**11.88**	**594.00**

48	Digging of trench of 0.6 m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc.,complete. .a) In soil (ordinary)								
		m	30				30.00		
	Basic rate							76	
	Total						**30.00**	**76.00**	**2280.00**
49	Supplying and fixing of class A (medium duty) GI pipe of wall thick ness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV class. a) 40mm								
		m	2				2.00		
	Basic rate							335	
	Total						**2.00**	**335.00**	**670.00**
50	Supplying &fixing L.T.cast iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers ect.b) 16 Sqmm								
		Each	1				1.00		
	Basic rate							270	
	Total						**1.00**	**270.00**	**270.00**
51	Providing BESCOM deposits excuding ESCOM 3 pahse energy meter (as per intimation letter from ESCOMS) for 10hp 3phase power supply under LT-5 tariff.								
		L.S	1				1.00		
	Total						**1.00**	**10000.00**	**10000.00**

Total Amount	**1694532.31**
GST Charges (18% of estimated cost)	**305015.82**
Miscellaneous and Rounding off	**451.87**
Total Amount	**2000000.00**

(Twenty Lakhs Only)

CERTIFICATE:

1) The work spot has been inspected and found to be necessary

2) The work spot comes under B.B.M.P

3) The provisions made in the estimate are necessary and minimum.

4) The estimate is based on S.R of 2021-2022, PWD Electrical SR 2021-22, Data Rates, Issused Rates and Corrigenda 1 & 2.

Assistant Engineer
BBMP

Assistant Executive Engineer
BBMP

Executive Engineer
BBMP

Administrative Approval
Accorded For 20.00 Lakhs
Head of A/C P-3726
CER NO :...69..... 22/8/2022

TA

CE (YNK)

TECHNICALLY SANCTIONED FOR Rs. 20.00 Lakhs
Rupees Twenty lakhs Only
Under P-3726
Zonal Public Works
Registered as CE ( ) No. 99
Subject to conditions ed in
enclosed memo EE ( ) No 43 /9/
Dt. 23/8/22 E otioned
BBMP/EE/YNK·D/TS/43/22-23 43
Dated 23/8/22 Rs. 20.00 Lakhs

Executive Engineer